



3135 Resistive Gauge Driver

Installation and Operating Instructions

Introduction

The 3135 Resistive Gauge Driver is designed to drive resistive analogue tank level gauges from the digital NMEA2000® network.

The unit supports both European standard 0-180Ω and the United States standard 240-30Ω gauges on either 12 or 24 volt systems.

The unit has a single "micro" sized plug that links it to the NMEA2000® network and a 0.5 metre cable to link to the gauge. No additional cabling is required.

Safety Instructions

This unit should only be installed by a person competent and experienced in working on electrical systems on boats. Before beginning work the battery should be disconnected to avoid the risk of a short circuit, a fire or an explosion.

Before drilling any holes to mount the unit or run the cabling always make sure it is safe to do so.

Location and installation

The Resistive Gauge Driver should be located within 0.5 metre (about 18 inches) of the resistive analogue Tank Level Gauge.

It is designed to be included with the local bundle of cables to the gauges and should be secured to the bundle or to a convenient position using cable ties.

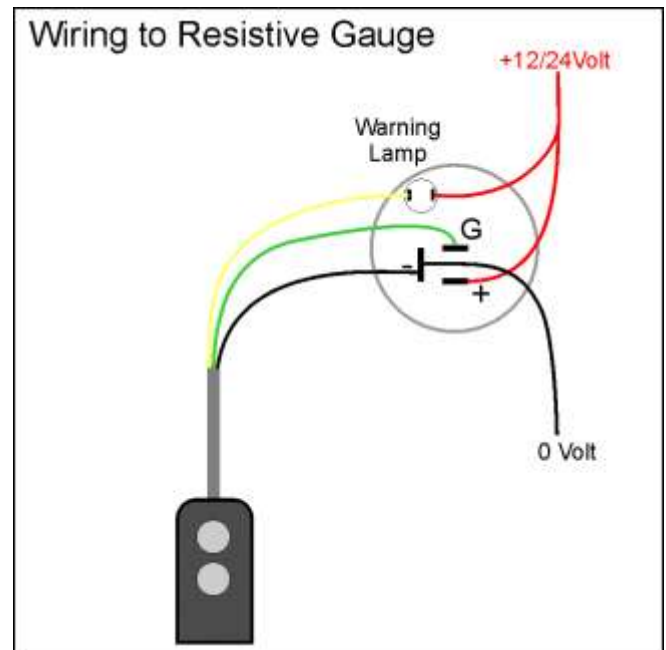
Wiring

The micro plug on the Adaptor cable should be mounted into a T adaptor on the NMEA2000® network.

Ensure that it is mated securely and the retaining ring has been tightened correctly to ensure the junction is waterproof.

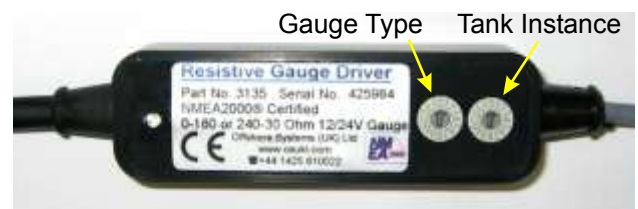
Note that this drop cable length may be extended to a maximum of 6 metres from the T adaptor by using extra micro drop cables.

The other cable is wired to the gauge as follows:



Setting Up and Operation

When the unit is installed the small rotary switches should be set to reflect the gauge resistance, the tank contents and the tank instance.



The first switch sets the Gauge Resistance, Gauge Voltage and the Type of Tank as follows:

Gauge Resistance	Gauge Voltage	Tank Contents	Switch Position
Euro 0-180Ω	12v	Fuel	0
"	12v	Fresh Water	1
"	12v	Waste Water	2
"	12v	Black Water	3
"	24v	Fuel	4
"	24v	Fresh Water	5
"	24v	Waste Water	6
"	24v	Black Water	7
US 240-30Ω	12v	Fuel	8
"	12v	Fresh Water	9
"	12v	Waste Water	A
"	12v	Black Water	B
"	24v	Fuel	C
"	24v	Fresh Water	D
"	24v	Waste Water	E
"	24v	Black Water	F

The second switch sets the Tank Instance as follows:

Tank Instance	Switch Position
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A
11	B
12	C
13	D
14	E
15	F

Once the module has been installed there is no normal operator intervention required.

The unit has a blue LED which flashes every time the tank gauge adaptor receives a signal matching the switch positions.

If this is not flashing it means that the unit is not receiving power from the network or that no tank sender output matches the way the unit has been set up.

The gauges warning light can be driven by the Resistive Gauge Driver. The unit is programmed to light the warning light if the Waste Water or Black Water level exceeds 80% or if any other level falls below 20%

Calibration

This unit is fully calibrated and does not require any extra calibration.